

<110> Bandman, Olga Goli, Surya K. Lal, Preeti G. Corley, Neil C. Zhang, Hong

<120> NEW PROTEIN PHOSPHATASE

- <130> PF-0319-1 DIV
- <140> To Be Assigned
- <141> Herewith
- <160> 4
- <170> PERL Program
- <210> 1
- <211> 479
- <212> PRT
- <213> Homo sapiens
- <220>
- <221> misc_feature
- <223> Incyte ID No: 013177CD1

<400> 1

```
Met Gly Ala Phe Leu Asp Lys Pro Lys Thr Glu Lys His Asn Ala
                                       10
 His Gly Ala Gly Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln
                   20
                                       25
 Gly Trp Arg Val Glu Met Glu Asp Ala His Thr Ala Val Val Gly
                   35
                                       40
 Ile Pro His Gly Leu Glu Asp Trp Ser Phe Phe Ala Val Tyr Asp
                  50
                                       55
 Gly His Ala Gly Ser Arg Val Ala Asn Tyr Cys Ser Thr His Leu
                  65
                                       70
                                                            75
 Leu Glu His Ile Thr Thr Asn Glu Asp Phe Arg Ala Ala Gly Lys
                  80
                                       85
                                                            90
 Ser Gly Ser Ala Leu Glu Leu Ser Val Glu Asn Val Lys Asn Gly
                  95
                                      100
 Ile Arg Thr Gly Phe Leu Lys Ile Asp Glu Tyr Met Arg Asn Phe
                 110
                                      115
Ser Asp Leu Arg Asn Gly Met Asp Arg Ser Gly Ser Thr Ala Val
                                                          120
                 125
                                      130
                                                          135
Gly Val Met Ile Ser Pro Lys His Ile Tyr Phe Ile Asn Cys Gly
                 140
                                      145
Asp Ser Arg Ala Val Leu Tyr Arg Asn Gly Gln Val Cys Phe Ser
                 155
                                     160
Thr Gln Asp His Lys Pro Cys Asn Pro Arg Glu Lys Glu Arg Ile
                 170
                                     175
Gln Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val Asn Gly Ser
                 185
                                     190
                                                          195
Leu Ala Val Ser Arg Ala Leu Gly Asp Tyr Asp Tyr Lys Cys Val
                200
                                     205
                                                          210
Asp Gly Lys Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro Glu
                215
                                     220
                                                          225
Val Tyr Glu Ile Leu Arg Ala Glu Glu Asp Glu Phe Ile Ile Leu
                230
                                     235
                                                          240
Ala Cys Asp Gly Ile Trp Asp Val Met Ser Asn Glu Glu Leu Cys
                245
                                     250
Glu Tyr Val Lys Ser Arg Leu Glu Val Ser Asp Asp Leu Glu Asn
                260
Val Cys Asn Trp Val Val Asp Thr Cys Leu His Lys Gly Ser Arg
                275
                                     280
Asp Asn Met Ser Ile Val Leu Val Cys Phe Ser Asn Ala Pro Lys
```

```
PF-0319-1 DIV
```

```
295
                                                           300
  Val Ser Asp Glu Ala Val Lys Lys Asp Ser Glu Leu Asp Lys His
                  305
                                      310
                                                           315
  Leu Glu Ser Arg Val Glu Glu Ile Met Glu Lys Ser Gly Glu Glu
                                      325
                                                           330
 Gly Met Pro Asp Leu Ala His Val Met Arg Ile Leu Ser Ala Glu
                  335
                                      340
                                                           345
 Asn Ile Pro Asn Leu Pro Pro Gly Gly Gly Leu Ala Gly Lys Arg
                  350
                                      355
                                                           360
 Asn Val Ile Glu Ala Val Tyr Ser Arg Leu Asn Pro His Arg Glu
                  365
                                      370
 Ser Asp Gly Ala Ser Asp Glu Ala Glu Glu Ser Gly Ser Gln Gly
                 380
                                      385
 Lys Leu Val Glu Ala Leu Arg Gln Met Arg Ile Asn His Arg Gly
                 395
                                      400
 Asn Tyr Arg Gln Leu Leu Glu Glu Met Leu Thr Ser Tyr Arg Leu
                 410
                                      415
 Ala Lys Val Glu Gly Glu Glu Ser Pro Ala Glu Pro Ala Ala Thr
                 425
                                      430
                                                          435
 Ala Thr Ser Ser Asn Ser Asp Ala Gly Asn Pro Val Thr Met Gln
                                      445
 Glu Ser His Thr Glu Ser Glu Ser Gly Leu Ala Glu Leu Asp Ser
                 455
                                      460
 Ser Asn Glu Asp Ala Gly Thr Lys Met Ser Gly Glu Lys Ile
                                      475
 <210> 2
 <211> 2268
 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> Incyte ID No: 013177CB1
 <400> 2
atattgtacc tatcaggcgt cagctctcaa tctagatccc tccctggcct cggacttatt 60
gcaaaacatg ggtgcttttt tggataaacc caaaactgaa aaacataatg ctcatggtgc 120
tgggaatggt ttacgttatg gcctgagcag catgcaagga tggagagtgg aaatggaaga 180
tgcacacaca gctgttgtag gtattcctca cggcttggaa gactggtcat tttttgcagt 240
ttatgatggt catgctggat cccgagtggc aaattactgc tcaacacatt tattagaaca 300
catcactact aacgaagact ttagggcagc tggaaaatca ggatctgctc ttgagctttc 360
agtggaaaat gttaagaatg gtatcagaac tggatttttg aaaattgatg aatacatgcg 420
taacttttca gacctcagaa acgggatgga caggagtggt tcaactgcag tgggagttat 480
gatttcacct aagcatatct actttatcaa ctgtggtgat tcacgtgctg ttctgtatag 540
gaatggacaa gtctgctttt ctacccagga tcacaaacct tgcaatccaa gggaaaagga 600
gcgaatccaa aatgcaggag gcagcgtgat gatacaacgt gttaatggtt cattagcagt 660
atctcgtgct ctgggggact atgattacaa gtgtgttgat ggcaagggcc caacagaaca 720
acttgtttct ccagagcctg aggtttatga aattttaaga gcagaagagg atgaatttat 780
catcttggct tgtgatggga tctgggatgt tatgagtaat gaggagctct gtgaatatgt 840
taaatctagg cttgaggtat ctgatgacct ggaaaatgtg tgcaattggg tagtggacac 900
ttgtttacac aagggaagtc gagataacat gagtattgta ctagtttgct tttcaaatgc 960
tcccaaggtc tcagatgaag cggtgaaaaa agattcagag ttggataagc acttggaatc 1020
acgggttgaa gagattatgg agaagtctgg cgaggaagga atgcctgatc ttgcccatgt 1080
catgegeate ttgtctgeag aaaatateee aaatttgeet eetgggggag gtettgetgg 1140
caagcgtaat gttattgaag ctgtttatag tagactgaat ccacatagag aaagtgatgg 1200
ggcctccgat gaagcagagg aaagtggatc acagggaaaa ttggtggaag ctctcaggca 1260
aatgagaatt aatcataggg gaaactaccg acaacttctg gaggagatgc tgactagtta 1320
caggetaget aaagtagagg gagaagaaag ceetgetgaa eeagetgeea cagetaette 1380
ttcgaacagt gatgctggaa acccagtgac aatgcaggaa agccatactg aatcagaaag 1440
tggtcttgct gaattagaca gctctaatga agatgcaggg acaaagatga gtggtgaaaa 1500
aatatgactt teetttttgg taatattttt gtgatetttg atggttttta acctaggaag 1560
tgtaatgtat gcatttatat aactgttttg ttatttgaat cttggaaaac tagttttatt 1620
atattcagat agccttgttt tttaaaaagg cctttgcata cacctttatg agatagtgta 1680
```

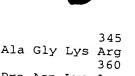
aaattgacta tttatagtac tatggattta atgaaattat atgtcatttc acattgtatg 1740



```
ccagaaatta ggctaccaat tatgaattaa agtcagtagt taaattaata ctagatagaa 1800
  ttagaaattt tgattagaga gattatgcta tattatggaa aaacttgtta atgtagaatt 1860
  atactgette atattattt acctattagt acacteatag ttagetttgt aataaattta 1920
  tgttttcttt aataatttta gttcttcaaa gaatggctga tgctggcctg taattttct 1980
  ttcaaggatg ataatttgtg tgttgtttga tttgtttata ttttacatct ctgtagtttt 2040
 atttttagaa gttgtgagat attggatgtg tggctatttt tcctttctct gtattcttta 2100
  tgaaacataa cttttgaaaa acctatgtat tattcataca gctttggttt gtatattctg 2160
  tatagcctaa ctacacacat caaaatgtat gtcaaccaag tgtttagaat gaaattataa 2220
 gtgtttaagt ccaaataaag catgtgatgt ggaataatca aaaaaaaa
 <210> 3
 <211> 390
 <212> PRT
 <213> Homo sapiens
 <220>
 <221> misc_feature
 <223> ID No: g247927
 <400> 3
 Met Gly Ala Phe Leu Asp Lys Pro Lys Thr Glu Lys His Asn Ala
   1 .
                                       10
                                                            15
 His Gly Ala Gly Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln
                  20
                                                            30
 Gly Trp Arg Val Glu Met Glu Asp Ala His Thr Ala Val Val Gly
                                                            45
 Ile Pro His Gly Leu Glu Asp Trp Ser Phe Phe Ala Val Tyr Asp
                  50
                                       55
                                                            60
 Gly His Ala Gly Ser Arg Val Ala Asn Tyr Cys Ser Thr His Leu
                  65
                                       70
 Leu Glu His Ile Thr Thr Asn Glu Asp Phe Arg Ala Ala Asp Lys
                  80
                                       85
                                                            90
 Ser Gly Phe Ala Leu Glu Pro Ser Val Glu Asn Val Lys Thr Gly
                  95
                                      100
                                                          105
 Ile Arg Thr Gly Phe Leu Lys Ile Asp Glu Tyr Met Arg Asn Phe
                 110
                                      115
                                                          120
 Ser Asp Leu Arg Asn Gly Met Asp Arg Ser Gly Ser Thr Ala Val
                 125
                                      130
                                                          135
Gly Val Met Ile Ser Pro Thr His Ile Tyr Phe Ile Asn Cys Gly
                 140
                                      145
                                                          150
Asp Ser Arg Ala Val Leu Cys Arg Asn Gly Gln Val Cys Phe Ser
                 155
                                      160
                                                          165
Thr Gln Asp His Lys Pro Cys Asn Pro Met Glu Lys Glu Arg Ile
                 170
                                      175
                                                          180
Gln Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val Asn Gly Ser
                 185
                                     190
                                                          195
Leu Ala Val Ser Arg Ala Leu Gly Asp Tyr Asp Tyr Lys Cys Val
                 200
                                     205
Asp Gly Lys Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro Glu
                 215
                                     220
Val Tyr Glu Ile Leu Arg Ala Glu Glu Asp Glu Phe Val Val Leu
                230
                                     235
Ala Cys Asp Gly Ile Trp Asp Val Met Ser Asn Glu Glu Leu Cys
                245
                                     250
                                                          255
Glu Phe Val Asn Ser Arg Leu Glu Val Ser Asp Asp Leu Glu Asn
                260
                                     265
                                                          270
Val Cys Asn Trp Val Val Asp Thr Cys Leu His Lys Gly Ser Arg
                275
                                     280
                                                          285
Asp Asn Met Ser Ile Val Leu Val Cys Phe Ala Asn Ala Pro Lys
                290
                                     295
                                                          300
Val Ser Asp Glu Ala Val Lys Arg Asp Leu Glu Leu Asp Lys His
                305
                                     310
                                                         315
Leu Glu Ser Arg Val Glu Glu Ile Met Gln Lys Ser Gly Glu Glu
                320
                                     325
                                                         330
Gly Met Pro Asp Leu Ala His Val Met Arg Ile Leu Ser Ala Glu
```

and the state of t





```
340
Asn Ile Pro Asn Leu Pro Pro Gly Gly Leu Ala Gly Lys Arg
                350
                                    355
Asn Val Ile Glu Ala Val Tyr Ser Arg Leu Asn Pro Asn Lys Asp
                365
                                    370
                                                        375
Asn Asp Gly Gly Ala Gly Asp Leu Glu Asp Ser Leu Val Ala Leu
                                    385
```

<210> 4 <211> 390 <212> PRT <213> Homo sapiens

<220> <221> misc_feature <223> ID No: g452526

<400> 4 Met Gly Ala Phe Leu Asp Lys Pro Lys Thr Glu Lys His Asn Ala His Gly Ala Gly Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln Gly Trp Arg Val Glu Met Glu Asp Ala His Thr Ala Val Val Gly Ile Pro His Gly Leu Asp Asn Trp Ser Phe Phe Ala Val Tyr Asp Gly His Ala Gly Ser Arg Val Ala Asn Tyr Cys Ser Thr His Leu Leu Glu His Ile Thr Thr Asn Glu Asp Phe Arg Ala Ala Asp Lys Ser Gly Ser Ala Leu Glu Pro Ser Val Glu Ser Val Lys Thr Gly Ile Arg Thr Gly Phe Leu Lys Ile Asp Glu Tyr Met Arg Asn Phe Ser Asp Leu Arg Asn Gly Met Asp Arg Ser Gly Ser Thr Ala Val Gly Val Met Val Ser Pro Thr His Met Tyr Phe Ile Asn Cys Gly Asp Ser Arg Ala Val Leu Cys Arg Asn Gly Gln Val Cys Phe Ser Thr Gln Asp His Lys Pro Cys Asn Pro Val Glu Lys Glu Arg Ile Gln Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val Asn Gly Ser Leu Ala Val Ser Arg Ala Leu Gly Asp Tyr Asp Tyr Lys Cys Val Asp Gly Lys Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro Glu Val Tyr Glu Ile Val Arg Ala Glu Glu Asp Glu Phe Val Val Leu Ala Cys Asp Gly Ile Trp Asp Val Met Ser Asn Glu Glu Leu Cys Glu Phe Val Lys Ser Arg Leu Glu Val Ser Asp Asp Leu Glu Asn Val Cys Asn Trp Val Val Asp Thr Cys Leu His Lys Gly Ser Arg Asp Asn Met Ser Val Val Leu Val Cys Phe Ser Asn Ala Pro Lys Val Ser Glu Glu Ala Val Lys Arg Asp Ser Glu Leu Asp Lys His Leu Glu Ser Arg Val Glu Glu Ile Met Gln Lys Ser Gly Glu Glu Gly Met Pro Asp Leu Ala His Val Met Arg Ile Leu Ser Ala Glu



